

Amendments to the Claims:

The following is a complete claim set with status identifiers. Please substitute the pending claims with the following claim set:

1. (currently amended) An isolated amino acid sequence comprising ~~an amino acid sequence selected from the group consisting of:~~
 - (i) amino acids 17 to 180 of SEQ ID NO: 2,
 - (ii) ~~amino acids 17 to 180 of SEQ ID NO: 4, and~~
 - (iii) ~~an immunogenic fragment of (i) or (ii);~~

wherein said sequence provides prophylactic or therapeutic treatment of an infection or its clinical signs caused by an organism of the family Babesiidae.

2. (currently amended) The sequence according to claim 1, comprising SEQ ID NO 2 ~~or an immunogenic fragment thereof.~~
3. (withdrawn) The sequence according to claim 1, comprising SEQ ID NO 4 or an immunogenic fragment thereof.
4. (previously presented) A nucleic acid that encodes the sequence according to claim 1.
5. (previously presented) The nucleic acid according to claim 4 comprising SEQ ID NO: 1.
6. (withdrawn) The nucleic acid according to claim 4 comprising SEQ ID NO: 3.
7. (previously presented) A cDNA fragment comprising the nucleic acid according to claim 4.

8. (previously presented) A recombinant DNA molecule comprising the nucleic acid according to claim 4, under the control of a functionally linked promoter.
9. (previously presented) A live recombinant carrier comprising the nucleic acid according to claim 4.
10. (previously presented) A host cell comprising the nucleic acid according to claim 4.
11. (previously presented) A vaccine comprising
 - i) the sequence according to claim 1; and
 - ii) a pharmaceutically acceptable carrier.
12. (previously presented) The vaccine according to claim 11, further comprising an adjuvant.
13. (previously presented) The vaccine according to claim 11, further comprising an additional immunoactive component or a nucleic acid encoding said additional immunoactive component.
14. (previously presented) The vaccine according to claim 13, wherein said additional immunoactive component or nucleic acid encoding said additional immunoactive component is obtained from an organism selected from the group consisting of *Ehrlichia canis*, *Babesia gibsoni*, *B. vogeli*, *B. rossi*, *Leishmania donovani*-complex, Canine parvovirus, Canine distempervirus, *Leptospira interrogans serovar canicola*, *Leptospira interrogans serovar icterohaemorrhagiae*, *Leptospira interrogans serovar pomona*, *Leptospira interrogans serovar grippotyphosa*, *Leptospira interrogans serovar bratislava*, Canine hepatitisvirus, Canine parainfluenzavirus, rabies virus, *Hepatozoon canis* and *Borrelia burgdorferi*.
15. (previously presented) A vaccine comprising

- i) an antibody against the sequence according to claim 1, and
 - ii) a pharmaceutically acceptable carrier.
16. (withdrawn) A method for the preparation of a vaccine comprising the admixing of
- i) the sequence according to claim 1, and
 - ii) a pharmaceutically acceptable carrier.
17. (withdrawn) A method for the preparation of a vaccine comprising the admixing of
- i) an antibody against the sequence according to claim 1 and
 - ii) a pharmaceutically acceptable carrier.
18. (withdrawn) A method of prophylaxis or treatment of an infection or its clinical signs caused by an organism of the family Babesiidae, comprising administering a vaccine comprising the sequence according to claim 1.
19. (currently amended) A diagnostic test for the detection of a nucleic acid associated with an organism of the family Babesiidae, comprising a nucleic acid sequence selected from the group consisting of:
- (i) SEQ ID NO: 1;
 - (ii) a fragment of SEQ ID NO: 1 at least ~~[[12]]~~ 15 nucleotides long; and
 - (iii) ~~SEQ ID NO: 3;~~
 - (iv) ~~a fragment of SEQ ID NO: 3 at least 12 nucleotides long; and~~
 - (v) a nucleic acid that is complementary to (i) or (ii) ~~any of (i) through (iv).~~
20. (previously presented) A diagnostic test for the detection of antibodies against an organism of the family Babesiidae, comprising the sequence according to claim 1.

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21. (previously presented) A diagnostic test for the detection of antigenic material from an organism of the family Babesiidae, comprising an antibody against the sequence according to claim 1.